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Titre

[E3][td1] Serie N°3
Avec Cor.

Type

Exercices

Ecole

FST Tanger

Classe

MIPCI

Matière

Chimie minérale

Professeur

Année univ

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Travaux dirigés – Module C121 Chimie Organique
Série 3
LES GROUPES FONCTIONNELS (2)

I. Ecrire les formules semi-développées des composés suivants :

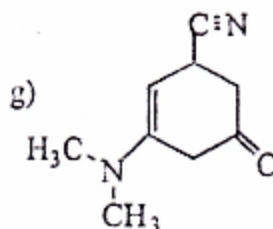
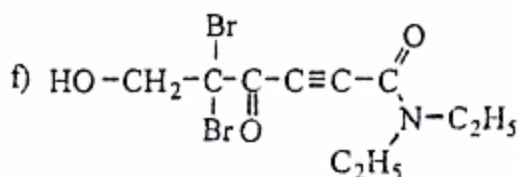
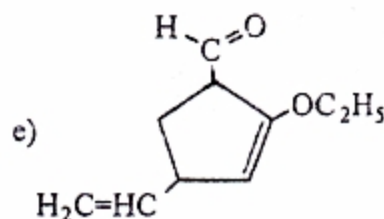
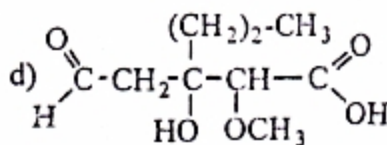
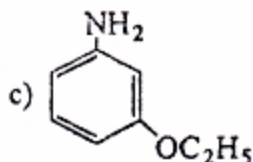
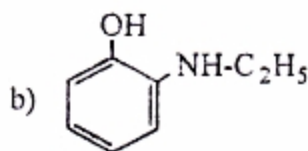
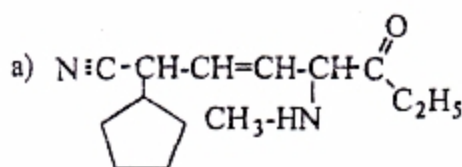
- Acide méta chloro benzoïque
- Trichloroéthylène
- Hexanoate d'éthyle
- Acide 2-amino 3-phényl propanoïque
- Hex 1-yne 3-one
- 4-éthyl 3-méthyl 5-(N,N diméthylamino) hexan 2-one
- N-isobutyl propanamide
- Acide 2-oxo cyclopentane carboxylique
- 2-méthoxy 3-méthyl hept 2-ène

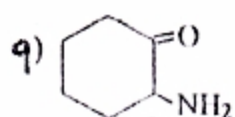
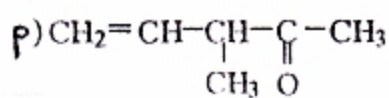
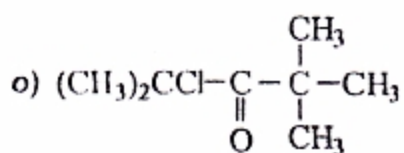
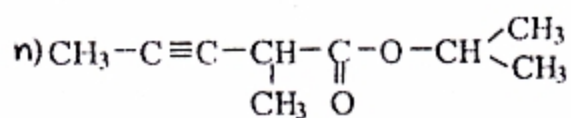
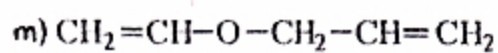
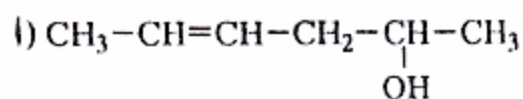
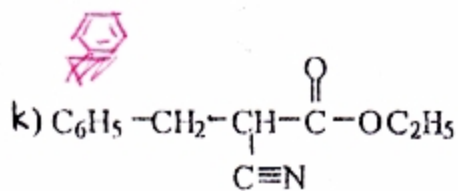
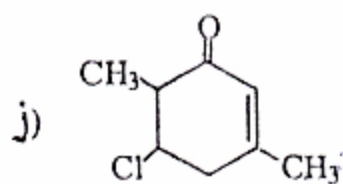
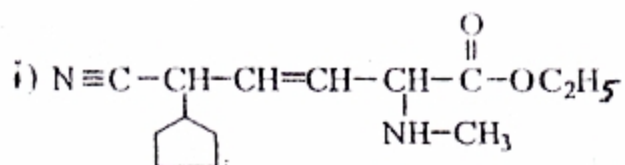
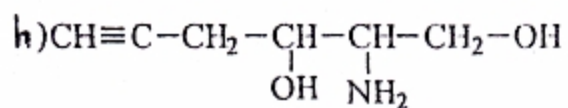
II. Parmi les composés suivants :

- $\text{CH}_3-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{OH}$
- $\text{CH}_3-\text{C}(\text{O})-\text{CH}_3$
- $\text{CH}_3-\underset{\text{OH}}{\text{CH}}-\text{CH}_2-\text{CH}_2-\text{CH}_3$
- $\text{CH}_3-\text{CH}_2-\underset{\text{O}}{\text{C}}-\text{H}$
- $\text{CH}_3-\text{CH}_2-\underset{\text{OH}}{\text{CH}}-\text{CH}_2-\text{CH}_3$
- $\text{CH}_2=\text{CH}-\text{CH}_2-\text{OH}$

- Quels sont les isomères de position ?
- Quels sont les isomères de fonction ?

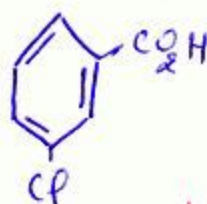
III. Donner le nom systématique selon l'IUPAC des composés :



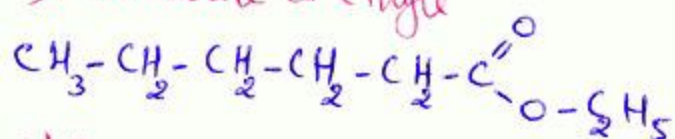


➤ Exercice 1 :

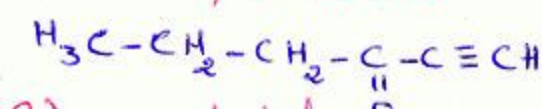
a) Acide méta chloro benzoïque



c) Hexanoate d'éthyle



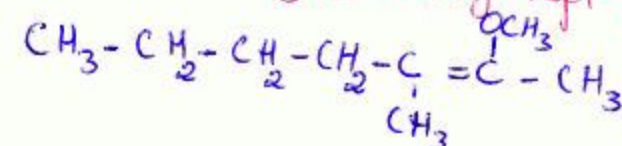
e) Hex 1-yne 3-one



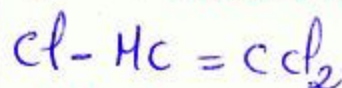
g) N-isobutyl propanamide



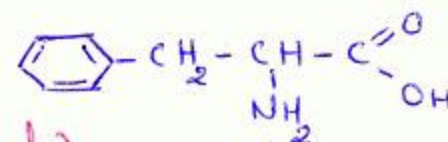
i) 2-méthoxy 3-méthyl hept 2-ène



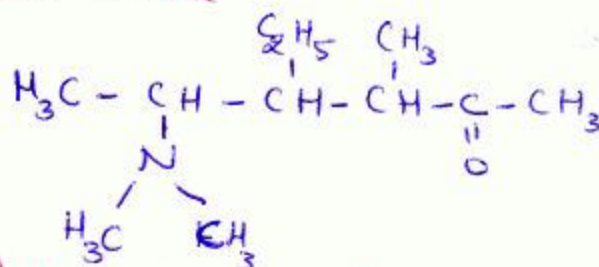
b) Tri.chloroéthylène



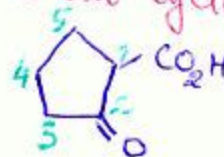
d) Acide 2-amino 3-phényl propanoïque



f) 4-éthyl 3-méthyl 5-(N,N diméthylamino) hexan 2-one



h) Acide 2-oxo cyclopentane carboxylique

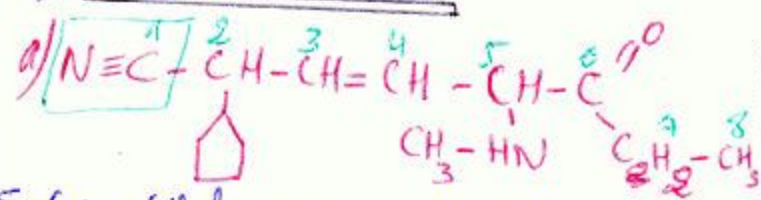
➤ Exercice 2 :- Isomères de position : différent par la position d'un groupe ou d'une double (triple) liaison sur la chaîne.- Isomères de fonction : différent par la nature de la fonction.- Isomères de chaîne ou de squelette : différent par la chaîne (linéaire - ramifiée ou aliphatique - cyclique).

→ a - c - e : Isomères de position (position de OH sur la chaîne).

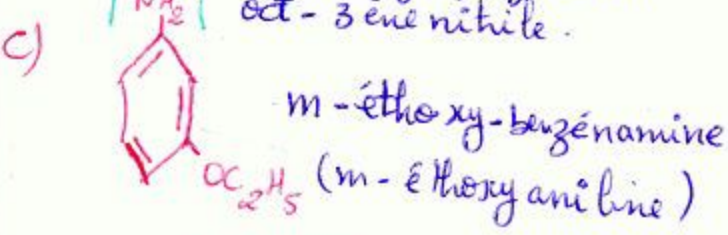
→ b - d - f : Isomères de fonction.



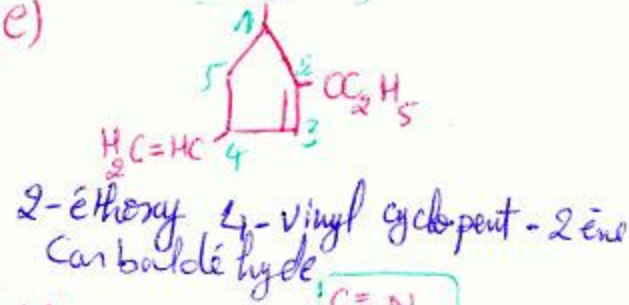
Exercice 3 :

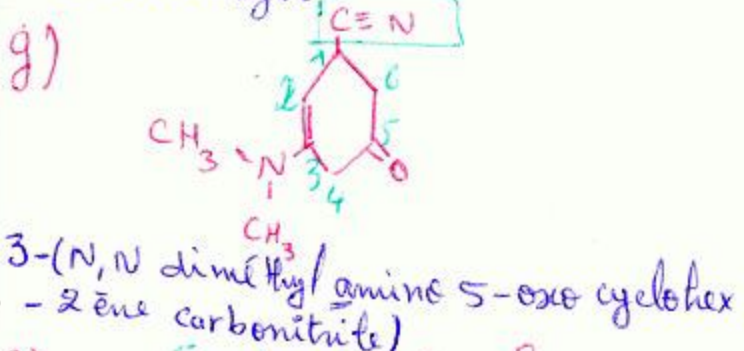


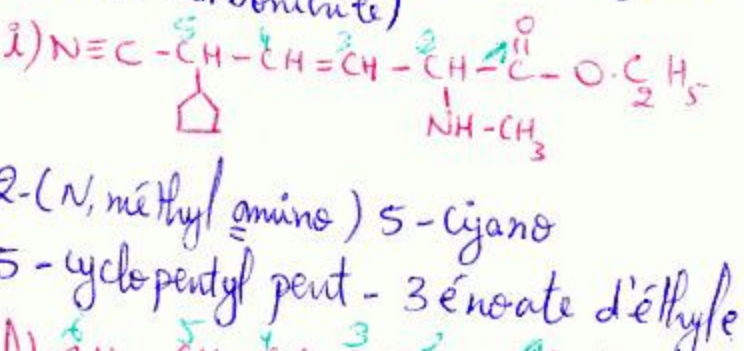
5-(N-méthylamino) 2-cyclopentyl 6-oxooct-3-ène nitrile.



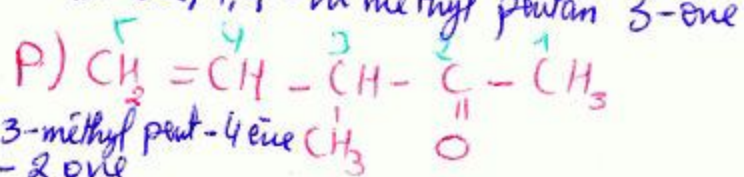
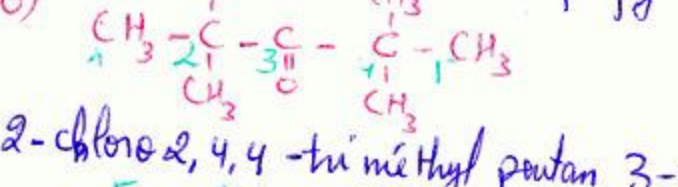
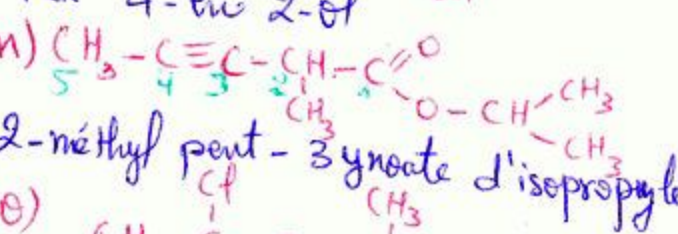
m-éthoxy-benzénamine
OC₂H₅ (m-éthoxy aniline)



2-éthoxy 4-vinyl cyclopent-2-ène
Carbaldéhyde
g) 

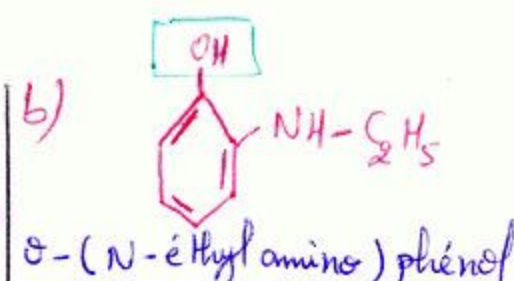


2-(N-méthylamino) 5-cyano
5-cyclopentyl pent-3-énoate d'éthyle

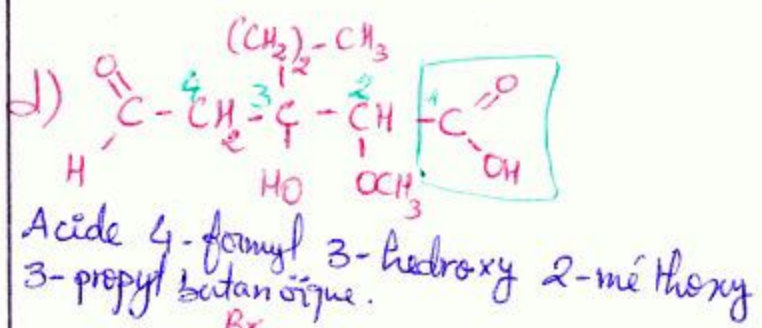


2-chloro 2,4,4-triméthyl pentan 3-ène
p) 

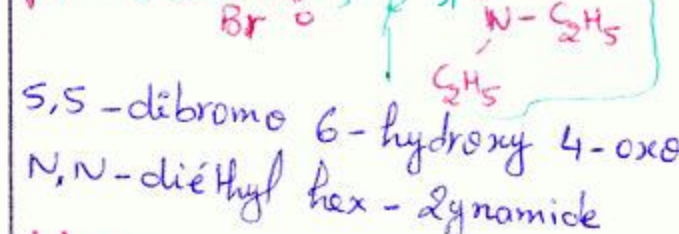
3-méthyl pent-4-ène
-2-ène



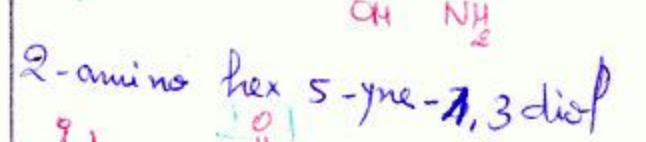
8-(N-éthylamino) phénol



Acide 4-formyl 3-hydroxy 2-méthoxy
3-propyl butanoïque.



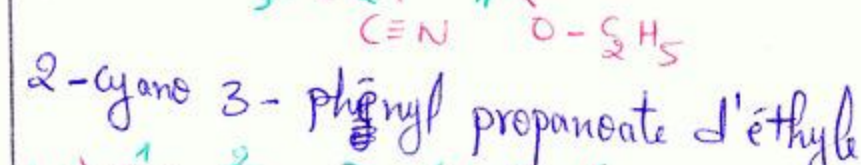
5,5-dibromo 6-hydroxy 4-oxo
N,N-diéthyl hex-2-ynamide



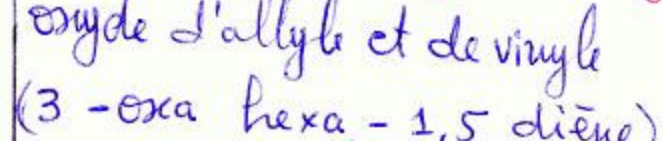
2-amino hex 5-yne-1,3-diol



3-chloro 2,5-diméthyl cyclohex-5-énone



2-cyano 3-phényl propanoate d'éthyle



oxyde d'allyle et de vinyle
(3-oxa hexa-1,5-diène)



2-amino cyclohexanone